UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

ECOFACTOR, INC, Plaintiff, v. ECOBEE, INC., Defendant.	Case No. 6:20-cv-00078 **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

This is an action for patent infringement arising under the Patent Laws of the United States of America, 35 U.S.C. § 1 *et seq.*, in which Plaintiff EcoFactor, Inc. ("Plaintiff" or "EcoFactor") makes the following allegations against Defendant Ecobee, Inc. ("Defendant"):

INTRODUCTION

1. This complaint arises from Defendant's unlawful infringement of the following United States patents owned by EcoFactor: U.S. Patent No. 8,180,492 ("'492 Patent"); U.S. Patent No. 8,412,488 ("'488 Patent"); U.S. Patent No. 8,738,327 ("'327 Patent"); and U.S. Patent No. 10,534,382 ("'382 Patent") (collectively the "Asserted Patents").

PARTIES

2. EcoFactor is a privately held company, having its principal place of business at 441 California Avenue, Number 2, Palo Alto, CA 94301.[1] EcoFactor was founded in 2006 and is headquartered in Palo Alto, California. EcoFactor is a leader in smart home energy management

[1] Prior to October 2019, EcoFactor's principal place of business was at 1450 Veterans Blvd., Suite 100, Redwood City, CA 94063.

services. EcoFactor delivers smart home energy management services that improve energy efficiency, reduce energy bills and vastly increase demand response efficacy – all while maintaining consumer comfort. EcoFactor's patented big-data analytics and machine learning algorithms collect and process massive amounts of residential data – including home thermodynamics, family comfort preferences and schedules, plus external data such as weather – to continually monitor, adapt and learn for optimum energy savings. The company provides homeowners significant cost savings and energy usage benefits. EcoFactor's award-winning service has been offered through channel partners such as utilities, energy retailers, broadband service providers and HVAC companies.

3. EcoFactor has transformed how homes use energy by applying advanced analytics to connected devices in the home. EcoFactor's platform actively manages thermostats on occupants' behalf in intelligent ways that improve comfort while helping them save time, energy and money. Utilities, home service providers and homeowners rely on EcoFactor for demand response, energy efficiency, and HVAC performance monitoring services.

4. The HVAC industry and researchers in the field recognize the technological and commercial impact of EcoFactor's patented technologies and innovations. For example, EcoFactor's demand response solution has been recognized multiple times from the Association of Energy Services Professionals (AESP) for outstanding achievement in pricing and demand response. EcoFactor was also named "Innovator of the Year" by San Mateo County Economic Development Association for EcoFactor's automated approach to energy efficiency and demand response services, and has also been named Owler HOT in Redwood City, CA. Moreover, EcoFactor received Powergrid International's Demand Response/Energy Efficiency Project of the Year award, and was assessed as one of the top innovators with some of the most commercially

important smart home patents.

5. Ecobee, Inc. is a Canadian corporation with its principal place of business at 25 Dockside Drive, Suite 600, Toronto ON, Canada.

JURISDICTION AND VENUE

6. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. This Court has personal jurisdiction over Defendant in this action. because Defendant has committed acts within this District giving rise to this action, and have established minimum contacts with this forum such that the exercise of jurisdiction over Defendant would not offend traditional notions of fair play and substantial justice. Defendant, directly and through subsidiaries or intermediaries, has committed and continue to commit acts of infringement in this District by, among other things, importing, offering to sell, and selling products that infringe the asserted patents.

8. Venue is proper in this District under 28 U.S.C. § 1400(b). Defendant is a foreign corporations subject to suit in any district. Upon information and belief, Defendant has transacted business in this District and have committed acts of direct and indirect infringement in this District by, among other things, making, using, offering to sell, selling, and importing products that infringe the asserted patents. Defendant has, for example, partnered with Austin Energy to offer incentives for customers in this District to purchase the infringing products, and Defendant has and continue to target advertisement to potential customers in this District.

COUNT I

INFRINGEMENT OF U.S. PATENT NO. 8,180,492

9. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

10. Plaintiff is the owner and assignee of United States Patent No. 8,180,492 titled "System and method for using a networked electronic device as an occupancy sensor for an energy management system." The '492 Patent was duly and legally issued by the United States Patent and Trademark Office on May 15, 2012. Plaintiff is the owner and assignee, possessing all substantial rights, to the '492 Patent. A true and correct copy of the '492 Patent is attached as Exhibit 1.

11. Defendant makes, uses, offers for sale, sells, and/or imports into the United States certain products and services that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '492 Patent, and continue to do so. By way of illustrative example, these infringing products and services include, without limitation, Defendant's products and services, *e.g.*, ecobee3, ecobee3 lite, ecobee4, Ecobee SmartThermostat, and Ecobee SmartSensor and all versions and variations thereof since the issuance of the '492 Patent ("Accused Instrumentalities").

12. Defendant has had knowledge of the '492 patent from a date no later than the date of filing of this complaint. Defendant has known how the Accused Products are made and have known, or has been willfully blind to the fact, that making, using, offering to sell, and selling the accused products within the United States, or importing the Accused Products into the United States, would constitute infringement.

13. Defendant has induced, and continue to induce, infringement of the ’492 patent by actively encouraging others (including distributors and end customers) to use, offer to sell, sell, and import the Accused Products. On information and belief, these acts include providing information and instructions on the use of the Accused Products; providing information, education and instructions supporting sales by distributors; providing the Accused Products to distributors; and indemnifying patent infringement within the United States.

14. Defendant has also infringed, and continue to infringe, claims of the ‘492 patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Products, which are used in practicing the process, or using the systems, of the patent, and constitute a material part of the invention. Defendant knows the components in the Accused Products to be especially made or especially adapted for use in infringement of the patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. Accordingly, Defendant has been, and currently are, contributorily infringing the ’492 patent, in violation of 35 U.S.C. § 271(c).

15. The Accused Products satisfy all claim limitations of one or more claims of the ’492 Patent. For example the Accused Instrumentalities infringe claim 10 of the ’492 Patent. One, non-limiting, example of the Accused Instrumentalities’ infringement is presented below.

16. The Accused Instrumentalities include: “A system for altering the setpoint on a thermostat for space conditioning of a structure comprising: at least one thermostat having at least a first temperature setpoint associated with a non-occupied structure, and at least a second temperature setpoint associated with the existence of occupants in said structure.” For example, Ecobee contends that its SmartSensor “[w]orks with Smart Thermostat with voice control, ecobee4, ecobee3 lite, and ecobee3” and that it “[d]etects occupancy and sets the temperature for comfort

in the rooms that matter most." *E.g.*, https://www.ecobee.com/en-us/smart-sensor/.

17. The Accused Instrumentalities include "one or more electronic devices having at least a graphic user interface comprising a display wherein said electronic devices receive input from one or more users and wherein use of said electronic devices comprises at least one of cursor movement, keystrokes or other user interface actions intended to alter a state of one or more of said electronic devices by one or more users wherein activity of one or more networked electronic devices indicates whether said thermostat should be changed from said first temperature setpoint to said second temperature setpoint." For example, the Accused Instrumentalities include graphical user interfaces and are further are designed to work the Ecobee mobile application, which also includes a graphic user interface. These interfaces allow users to create comfort settings with hot and cold set points. Users can also enable or disable Smart Home/Away modes, enable or disable Follow Me mode, and alter temperature set points and comfort settings. Users can also set whether sensor occupancy data will be used to control temperature by altering sensor participation.

> With the release of the ecobee3 firmware 3.6, ecobee customers have been able to choose which sensors should be used in each of the Comfort Settings in their thermostat schedules. This gives you the unprecedented control you have come to expect from ecobee.

Let's look at an example with a family that purchased the ecobee3 smarter bundle (which comes with 3 remote sensors) and placed the sensors in: the family room, the kitchen, and the master bedroom.

- In this case, you can tell your ecobee3 to use the temperature and occupancy data from only the kitchen in the morning during the Home Comfort Setting.
- Then, tell it to use the information from all three sensors and the ecobee3 to calculate an average home temperature during your Away Comfort Setting.
- From 5 PM until 7:30 PM, it could use the temperature reading in your kitchen, and heat or cool the house to keep the kitchen comfortable while you cook and eat dinner.
- From 7:30 PM until 11 PM it will use the remote sensor in your family room to keep you and your family comfortable while you watch TV.
- Finally, from 11 PM until you wake up in the morning it will use the sensor in the master bedroom during the Sleep Comfort Setting, so you can rest easy knowing ecobee3 is working hard while you sleep.

Just as you can select which sensors participate in Comfort Settings, you can select which don't participate. This is useful if you want to monitor the temperature in specific rooms in the house without them impacting the ecobee3 heating and cooling decisions. For example, you can place one in the garage, or in the wine cellar to keep an eye on your vintages.

See https://www.ecobee.com/2015/06/feature-friday-sensor-participation/

SMART HOME

When your ecobee senses someone's home during a scheduled Away period...

And the following conditions are met:

- The Away or Custom Away Comfort Setting *has* been active for over an hour.
- Smart Home *hasn't* been active for at least two hours.

Smart Home intelligently switches on your Home Comfort Setting for maximum comfort.

How long does Smart Home run for?

When it's active, Smart Home will stay in effect until
a) two hours pass with no occupancy detected; **b)** it is cancelled; or **c)** the start of the next scheduled Comfort Setting.

What temperature set points are in effect when Smart Home is running?

Smart Home uses your Home Comfort Setting's hot and cold set points.

SMART AWAY

When your ecobee senses nobody's home during a scheduled Home period...

And:

- No occupancy has been detected for two straight hours during a scheduled Home period or when Smart Home is running.

Smart Away intelligently overrides your usual schedule—helping you save on your energy bill.

How long does Smart Away run for?

Smart Away runs until it detects occupancy or until the start of the next scheduled Away period.

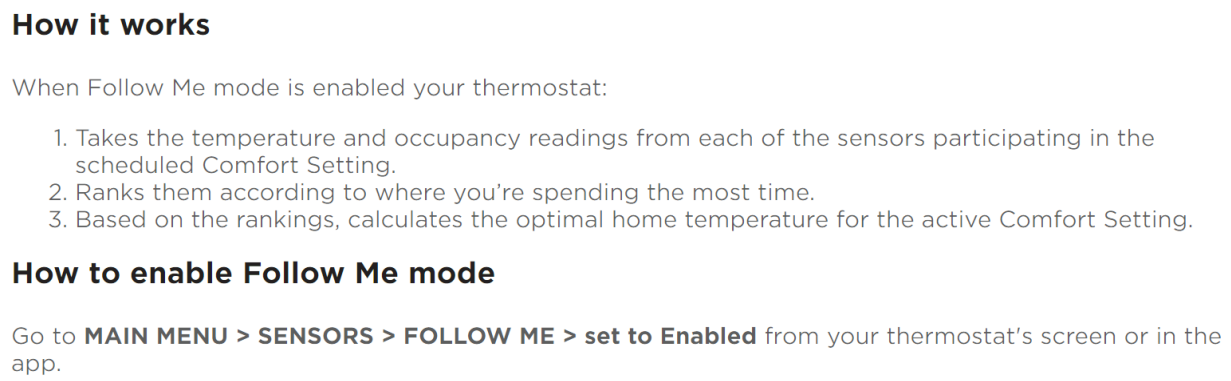
What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

recover the temperature gap.

How to enable Smart Home/Away

On your thermostat's screen or in the app, go to: **MAIN MENU > SENSORS > SMART HOME/AWAY > set to Enabled**



How it works

When Follow Me mode is enabled your thermostat:

1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
2. Ranks them according to where you're spending the most time.
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting.

18. The Accused Instrumentalities include "wherein said electronic devices and said thermostat are connected to a network; an application comprising one or more computer processors in communication with said network, wherein said application determines whether said one or more electronic devices are in use and in response, whether said thermostat is set to said first temperature setpoint that indicates said structure is not occupied." For example, the thermostats, sensors, and mobile device are connected to wireless networks and use the settings and mobile application described above. Using these applications, the Accused Instrumentalities can determine whether thermostats and sensors are in use and thus whether to set a first temperature that indicates that the structure is not occupied. For example, sensors associated with the Accused Instrumentalities can determine whether rooms are occupied or unoccupied. Likewise, users can schedule Home and Away periods. Users can determine whether to allow a sensor to participate in determining the set temperature based on its detected or set occupancy. In addition, allow users can enable or disable Smart Home/Away modes, enable or disable Follow Me mode, and alter temperature set points, participation, and comfort settings.

With the release of the ecobee3 firmware 3.6, ecobee customers have been able to choose which sensors should be used in each of the Comfort Settings in their thermostat schedules. This gives you the unprecedented control you have come to expect from ecobee.

Let's look at an example with a family that purchased the ecobee3 smarter bundle (which comes with 3 remote sensors) and placed the sensors in: the family room, the kitchen, and the master bedroom.

- In this case, you can tell your ecobee3 to use the temperature and occupancy data from only the kitchen in the morning during the Home Comfort Setting.
- Then, tell it to use the information from all three sensors and the ecobee3 to calculate an average home temperature during your Away Comfort Setting.
- From 5 PM until 7:30 PM, it could use the temperature reading in your kitchen, and heat or cool the house to keep the kitchen comfortable while you cook and eat dinner.
- From 7:30 PM until 11 PM it will use the remote sensor in your family room to keep you and your family comfortable while you watch TV.
- Finally, from 11 PM until you wake up in the morning it will use the sensor in the master bedroom during the Sleep Comfort Setting, so you can rest easy knowing ecobee3 is working hard while you sleep.

Just as you can select which sensors participate in Comfort Settings, you can select which don't participate. This is useful if you want to monitor the temperature in specific rooms in the house without them impacting the ecobee3 heating and cooling decisions. For example, you can place one in the garage, or in the wine cellar to keep an eye on your vintages.

See https://www.ecobee.com/2015/06/feature-friday-sensor-participation/

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When it's active, Smart Home will stay in effect until
a) two hours pass with no occupancy detected; **b)** it is cancelled; or **c)** the start of the next scheduled Comfort Setting.

What temperature set points are in effect when Smart Home is running?

Smart Home uses your Home Comfort Setting's hot and cold set points.

SMART AWAY

When your ecobee senses nobody's home during a scheduled Home period...

And:

- No occupancy has been detected for two straight hours during a scheduled Home period or when Smart Home is running.

Smart Away intelligently overrides your usual schedule—helping you save on your energy bill.

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Smart Away runs until it detects occupancy or until the start of the next scheduled Away period.

What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

recover the temperature gap.

How to enable Smart Home/Away

On your thermostat's screen or in the app, go to: **MAIN MENU > SENSORS > SMART HOME/AWAY > set to Enabled**

How it works

When Follow Me mode is enabled your thermostat:

1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
2. Ranks them according to where you're spending the most time.
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting.

19. The Accused Instrumentalities include "said application determining that said one or more users has previously indicated a preference that said user's input be obtained before automatically changing said first HVAC temperature setpoint to said second HVAC temperature setpoint indicating that said structure is deemed to be occupied; said application prompting said one or more users based on said determining that said one or more of said user's input should be obtained, wherein said application provides electronic notice to one or more of said users of said electronic devices that said thermostat is set for a non-occupied structure and whether to keep said first temperature setpoint or change to said second temperature setpoint; and wherein said application in response to said prompting, receives input from said one or more users to keep said first HVAC temperature setpoint; and wherein said thermostat is kept at said first temperature setpoint based upon said input from said one or more users." For example, the Accused Instrumentalities will store schedules set by a user with temperature set point information, scheduled Home and Away periods, and designated comfort settings. Users may set participation of sensors in comfort settings. The application allows non-participating sensors to provide notice of occupancy information to a user. Users instruct the device to override the preset Away or comfort settings based on information received regarding occupancy from a non-participating

sensor by, for example, adjusting Smart Home, Smart Away, or Follow Me settings or by adjusting participation of the sensor. The user provides this input using the applications described above.

20. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Defendant has injured Plaintiff and is liable for infringement of the '492 Patent pursuant to 35 U.S.C. § 271.

21. As a result of Defendant's infringement of the '492 Patent, Plaintiff is entitled to monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.

22. Defendant's infringing activities have injured and will continue to injure Plaintiff, unless and until this Court enters an injunction prohibiting further infringement of the '492 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.

COUNT II

INFRINGEMENT OF U.S. PATENT NO. 8,412,488

23. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

24. Plaintiff is the owner and assignee of United States Patent No. 8,412,488 titled "System and method for using a network of thermostats as tool to verify peak demand reduction." The '488 patent was duly and legally issued by the United States Patent and Trademark Office on April 2, 2013. Plaintiff is the owner and assignee, possessing all substantial rights, to the '488 Patent. A true and correct copy of the '488 Patent is attached as Exhibit 2.

25. Defendant makes, uses, offers for sale, sells, and/or imports into the United States

certain products and services that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '488 Patent, and continue to do so. By way of illustrative example, these infringing products and services include, without limitation, Defendant's products and services, *e.g.*, *e.g.*, ecobee3, ecobee3 lite, ecobee4, Ecobee SmartThermostat, and Ecobee SmartSensor and all versions and variations thereof since the issuance of the '488 Patent ("Accused Instrumentalities").

26. Defendant has had knowledge of the '488 patent from a date no later than the date of filing of this complaint. Defendant has known how the Accused Products are made and has known, or has been willfully blind to the fact, that making, using, offering to sell, and selling the accused products within the United States, or importing the Accused Products into the United States, would constitute infringement.

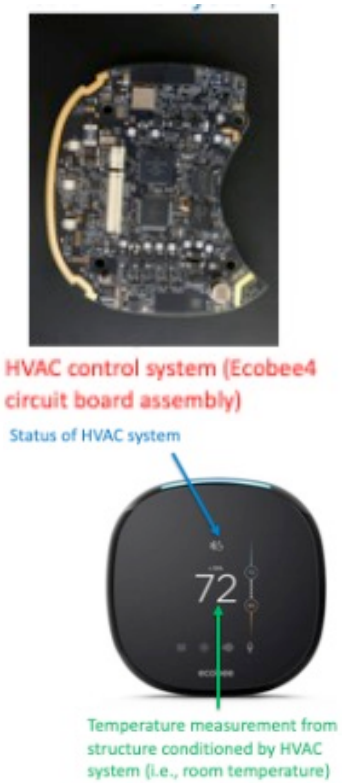
27. Defendant has induced, and continue to induce, infringement of the '488 patent by actively encouraging others (including distributors and end customers) to use, offer to sell, sell, and import the Accused Products. On information and belief, these acts include providing information and instructions on the use of the Accused Products; providing information, education and instructions supporting sales by distributors; providing the Accused Products to distributors; and indemnifying patent infringement within the United States.

28. Defendant has also infringed, and continue to infringe, claims of the '488 patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Products, which are used in practicing the process, or using the systems, of the patent, and constitute a material part of the invention. Defendant knows the components in the Accused Products to be especially made or especially adapted for use in infringement of the patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use.

Accordingly, Defendant has been, and currently are, contributorily infringing the ’488 patent, in violation of 35 U.S.C. § 271(c).

29. The Accused Products satisfy all claim limitations of one or more claims of the ’488 Patent. For example the Accused Instrumentalities infringe claim 1 of the ’488 Patent. One, non-limiting, example of the Accused Instrumentalities’ infringement is presented below.

30. The Accused Instrumentalities include “[a] system for monitoring the operational status of an HVAC system comprising: at least one HVAC control system associated with a first structure that receives temperature measurements from at least a first structure conditioned by at least one HVAC system.” For example, Accused Instrumentalities receive temperature measurements from inside the building that it is servicing.



31. The Accused Instrumentalities include "one or more processors that receive measurements of outside temperatures from at least one source other than said HVAC system." For example, the Accused Instrumentalities receive measurements of outside temperature from the internet.

Smart Recovery

ecobee4 understands how your home heats up and cools down, and uses wi-fi to track your local weather throughout the day. It then uses this information to determine the best way to bring your home to your desired indoor temperature when you arrive home and maintain it while minimizing how long your heating or cooling equipment runs for.

See https://www.ecobee.com/ecobee4/.

32. The Accused Instrumentalities include "wherein said one or more processors

compares the inside temperature of said first structure and the outside temperature over time to derive an estimation for the rate of change in inside temperature of said first structure in response to outside temperature, and wherein said one or more processors compare an inside temperature recorded inside the first structure with said estimation for the rate of change in inside temperature of said first structure to determine whether the first HVAC system is on or off." For example, the Accused Instrumentalities will compare internal temperature and external temperature and, other factors, to calculate the rate of change of inside temperature, and use this calculation to determine when to turn the HVAC system on or off.

Smart Recovery

ecobee4 understands how your home heats up and cools down, and uses wi-fi to track your local weather throughout the day. It then uses this information to determine the best way to bring your home to your desired indoor temperature when you arrive home and maintain it while minimizing how long your heating or cooling equipment runs for.

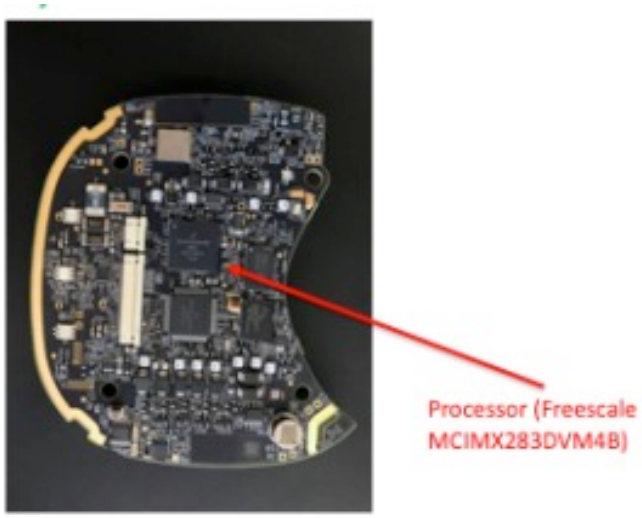
See https://www.ecobee.com/ecobee4/.

What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

*Actual number is based on your ecobee's ongoing analysis of your HVAC's equipment's ability to recover the temperature gap.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting.



33. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Defendant has injured Plaintiff and is liable for infringement of the '488 Patent pursuant to 35 U.S.C. § 271.

34. As a result of Defendant's infringement of the '488 Patent, Plaintiff is entitled to monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.

35. Defendant's infringing activities have injured and will continue to injure Plaintiff,

unless and until this Court enters an injunction prohibiting further infringement of the '488 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.

COUNT III

INFRINGEMENT OF U.S. PATENT NO. 8,738,327

36. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

37. Plaintiff is the owner and assignee of United States Patent No. 8,738,327 titled "System and method for using a network of thermostats as tool to verify peak demand reduction." The '327 patent was duly and legally issued by the United States Patent and Trademark Office on May 27, 2014. Plaintiff is the owner and assignee, possessing all substantial rights, to the '327 Patent. A true and correct copy of the '327 Patent is attached as Exhibit 3.

38. Defendant makes, uses, offers for sale, sells, and/or imports into the United States certain products and services that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '327 Patent, and continue to do so. By way of illustrative example, these infringing products and services include, without limitation, Defendant's products and services, *e.g.*, such as the ecobee3, ecobee3 lite, ecobee4, Ecobee SmartThermostat, and Ecobee SmartSensor, and all versions and variations thereof since the issuance of the '327 Patent ("Accused Instrumentalities").

39. Defendant has had knowledge of the '327 patent from a date no later than the date of filing of this complaint. Defendant has known how the Accused Products are made and have known, or have been willfully blind to the fact, that making, using, offering to sell, and selling

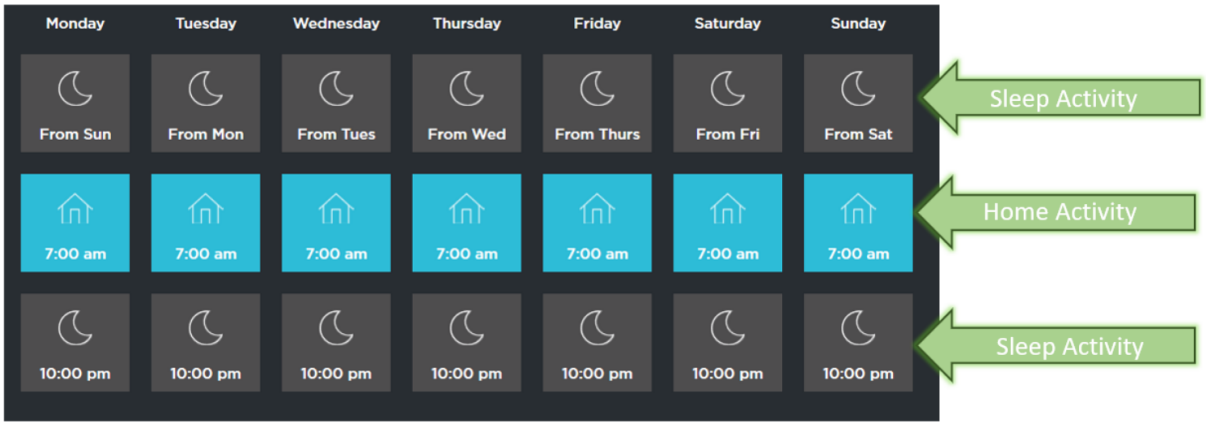
the accused products within the United States, or importing the Accused Products into the United States, would constitute infringement.

40. Defendant has induced, and continue to induce, infringement of the ’327 patent by actively encouraging others (including distributors and end customers) to use, offer to sell, sell, and import the Accused Products. On information and belief, these acts include providing information and instructions on the use of the Accused Products; providing information, education and instructions supporting sales by distributors; providing the Accused Products to distributors; and indemnifying patent infringement within the United States.

41. Defendant has also infringed, and continue to infringe, claims of the ‘327 patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Products, which are used in practicing the process, or using the systems, of the patent, and constitute a material part of the invention. Defendant knows the components in the Accused Products to be especially made or especially adapted for use in infringement of the patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. Accordingly, Defendant has been, and currently are, contributorily infringing the ’327 patent, in violation of 35 U.S.C. § 271(c).

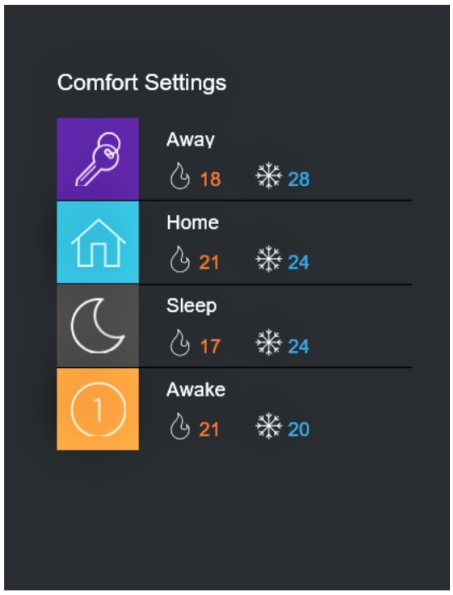
42. The Accused Products satisfy all claim limitations of one or more claims of the ’327 Patent. One, non-limiting, example of the Accused Instrumentalities’ infringement is presented below. For example, the Accused Instrumentalities include “[a] system for controlling the operational status of an HVAC system comprising: at least one thermostat associated with a structure that receives temperature measurements from inside the structure, the structure conditioned by at least one HVAC system, the thermostat having at least a first setting stored therein.” For example, the Accused Instrumentalities have a thermostat that receives temperature

settings from inside the structure which can store settings, including temperature set points, schedule for heating and cooling, Home and Away modes, Follow Me mode, comfort settings, and sensor participation settings.



The next part of the schedule are your **Comfort Settings**. This tells your ecobee what temperature you want your home to be during your **Activities**. The orange number is the heat setting, and the blue number is the cool setting.

Essentially, Comfort Settings are a predefined heat/cool setting that can be applied to a specific period of a day.



See https://support.ecobee.com/hc/en-us/articles/360025406171-What-are-Activities-and-Comfort-Settings-

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Let's look at an example with a family that purchased the ecobee3 smarter bundle (which comes with 3 remote sensors) and placed the sensors in: the family room, the kitchen, and the master bedroom.

- In this case, you can tell your ecobee3 to use the temperature and occupancy data from only the kitchen in the morning during the Home Comfort Setting.
- Then, tell it to use the information from all three sensors and the ecobee3 to calculate an average home temperature during your Away Comfort Setting.
- From 5 PM until 7:30 PM, it could use the temperature reading in your kitchen, and heat or cool the house to keep the kitchen comfortable while you cook and eat dinner.
- From 7:30 PM until 11 PM it will use the remote sensor in your family room to keep you and your family comfortable while you watch TV.
- Finally, from 11 PM until you wake up in the morning it will use the sensor in the master bedroom during the Sleep Comfort Setting, so you can rest easy knowing ecobee3 is working hard while you sleep.

Just as you can select which sensors participate in Comfort Settings, you can select which don't participate. This is useful if you want to monitor the temperature in specific rooms in the house without them impacting the ecobee3 heating and cooling decisions. For example, you can place one in the garage, or in the wine cellar to keep an eye on your vintages.

See https://www.ecobee.com/2015/06/feature-friday-sensor-participation/

SMART HOME

When your ecobee senses someone's home during a scheduled Away period...

And the following conditions are met:

- The Away or Custom Away Comfort Setting *has* been active for over an hour.
- Smart Home *hasn't* been active for at least two hours.

Smart Home intelligently switches on your Home Comfort Setting for maximum comfort.

How long does Smart Home run for?

When it's active, Smart Home will stay in effect until
a) two hours pass with no occupancy detected; **b)** it is cancelled; or **c)** the start of the next scheduled Comfort Setting.

What temperature set points are in effect when Smart Home is running?

Smart Home uses your Home Comfort Setting's hot and cold set points.

SMART AWAY

When your ecobee senses nobody's home during a scheduled Home period...

And:

- No occupancy has been detected for two straight hours during a scheduled Home period or when Smart Home is running.

Smart Away intelligently overrides your usual schedule—helping you save on your energy bill.

How long does Smart Away run for?

Smart Away runs until it detects occupancy or until the start of the next scheduled Away period.

What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

recover the temperature gap.

How to enable Smart Home/Away

On your thermostat's screen or in the app, go to: **MAIN MENU > SENSORS > SMART HOME/AWAY > set to Enabled**

How it works

When Follow Me mode is enabled your thermostat:

1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
2. Ranks them according to where you're spending the most time.
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting

43. For example, the Accused Instrumentalities include "one or more servers located remotely from the structure, the one or more servers configured to receive measurements of outside temperatures from at least one source other than the HVAC system." For example, the Accused Instrumentalities receive measurements of outside temperature from the internet and communicates with Ecobee's servers through the internet.

https://www.ecobee.com/ecobee4/

CAN I SET UP MY ECOBEE WITHOUT WI-FI?

The short answer is yes.

Even without a Wi-Fi connection, your ecobee will still function as a traditional thermostat; it will engage your equipment as needed and maintain your comfort set points.

You can simply skip the Wi-Fi Configuration portion when setting up your ecobee, though please be advised that skipping this step and never connecting your ecobee to Wi-Fi will not allow you to complete the registration process, so you will be unable to create an ecobee account.

In the event that you require assistance from our Support team, without a registered ecobee account with sufficient data, our Support team will be quite limited in the assistance they can provide, so we recommend initially connecting to Wi-Fi to at least register your thermostat.

After you've registered your thermostat, if you choose to proceed without a Wi-Fi connection, you will lose some of the ecobee's most useful features such as:

Remote access through the mobile app and Web Portal

You will not be able to check the status of your thermostat or make any changes through the mobile app or Web Portal.

Weather

Your thermostat will not have access to any weather data. If your home has a heat pump system, the ecobee relies on weather data to determine if it's safe to run your compressor.

Home IQ

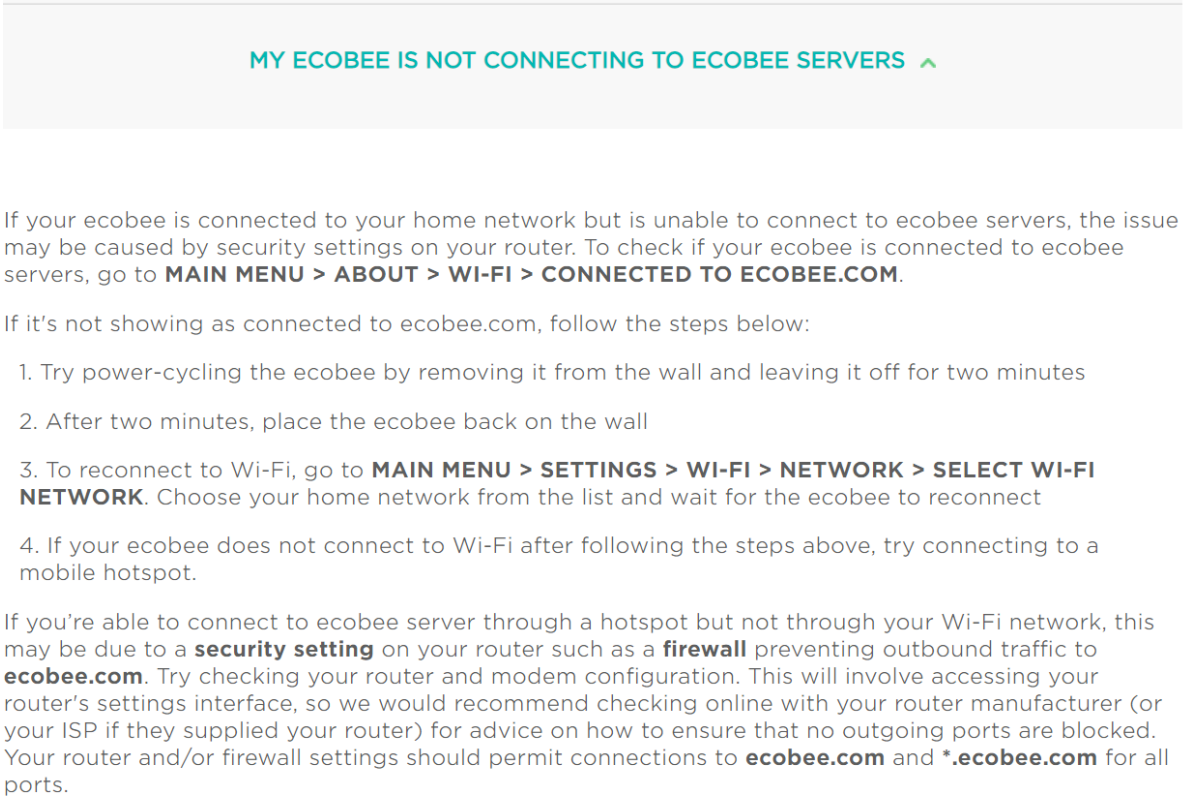
To generate Home IQ and System Monitor reports, your thermostat needs to be online and communicating with our servers, so you will not receive any efficiency reports or have access to any runtime data.

HomeKit, Alexa, and other APIs

Since HomeKit (Siri) and Alexa require a stable Wi-Fi connection (as do all other apps such as IFTTT, Wink, SmartThings), you will not be able to utilize any of these features.

Pairing a SmartSensor

To pair an ecobee SmartSensor to a thermostat, you will need to have the thermostat and your ecobee app on the same Wi-Fi connection. To know more about how to pair a SmartSensor to your thermostat, visit our general FAQ article.



MY ECOBEE IS NOT CONNECTING TO ECOBEE SERVERS

If your ecobee is connected to your home network but is unable to connect to ecobee servers, the issue may be caused by security settings on your router. To check if your ecobee is connected to ecobee servers, go to **MAIN MENU > ABOUT > WI-FI > CONNECTED TO ECOBEE.COM**.

If it's not showing as connected to ecobee.com, follow the steps below:

1. Try power-cycling the ecobee by removing it from the wall and leaving it off for two minutes
2. After two minutes, place the ecobee back on the wall
3. To reconnect to Wi-Fi, go to **MAIN MENU > SETTINGS > WI-FI > NETWORK > SELECT WI-FI NETWORK**. Choose your home network from the list and wait for the ecobee to reconnect
4. If your ecobee does not connect to Wi-Fi after following the steps above, try connecting to a mobile hotspot.

If you're able to connect to ecobee server through a hotspot but not through your Wi-Fi network, this may be due to a **security setting** on your router such as a **firewall** preventing outbound traffic to **ecobee.com**. Try checking your router and modem configuration. This will involve accessing your router's settings interface, so we would recommend checking online with your router manufacturer (or your ISP if they supplied your router) for advice on how to ensure that no outgoing ports are blocked. Your router and/or firewall settings should permit connections to **ecobee.com** and ***.ecobee.com** for all ports.

https://support.ecobee.com/hc/en-us/articles/360029033431-Wi-Fi-FAQ-Setup-Guide-and-Troubleshooting-

44. For example, Accused Instrumentalities include "the one or more servers are further configured to communicate with the thermostat via a network, wherein the one or more servers receive inside temperatures from the thermostat and compares the inside temperatures of the structure and the outside temperatures over time to derive an estimation for the rate of change in inside temperature of the structure in response to outside temperature." For example, the Accused Instrumentalities will compare internal temperature and external temperature and, other factors, to calculate the rate of change of inside temperature as well as the impact of external weather on the change in internal temperature. The devices communicate with the internet, through the internet to user mobile devices, and the Ecobee servers.

Smart Recovery

ecobee4 understands how your home heats up and cools down, and uses wi-fi to track your local weather throughout the day. It then uses this information to determine the best way to bring your home to your desired indoor temperature when you arrive home and maintain it while minimizing how long your heating or cooling equipment runs for.

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What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

*Actual number is based on your ecobee's ongoing analysis of your HVAC's equipment's ability to recover the temperature gap.

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Schedule

Under the Schedule tab, you can view data on your equipment runtime relative to your schedule. This will provide insight into how the system is operating, the temperature outside and inside, and how this all relates to your setbacks and settings in each Comfort Setting.

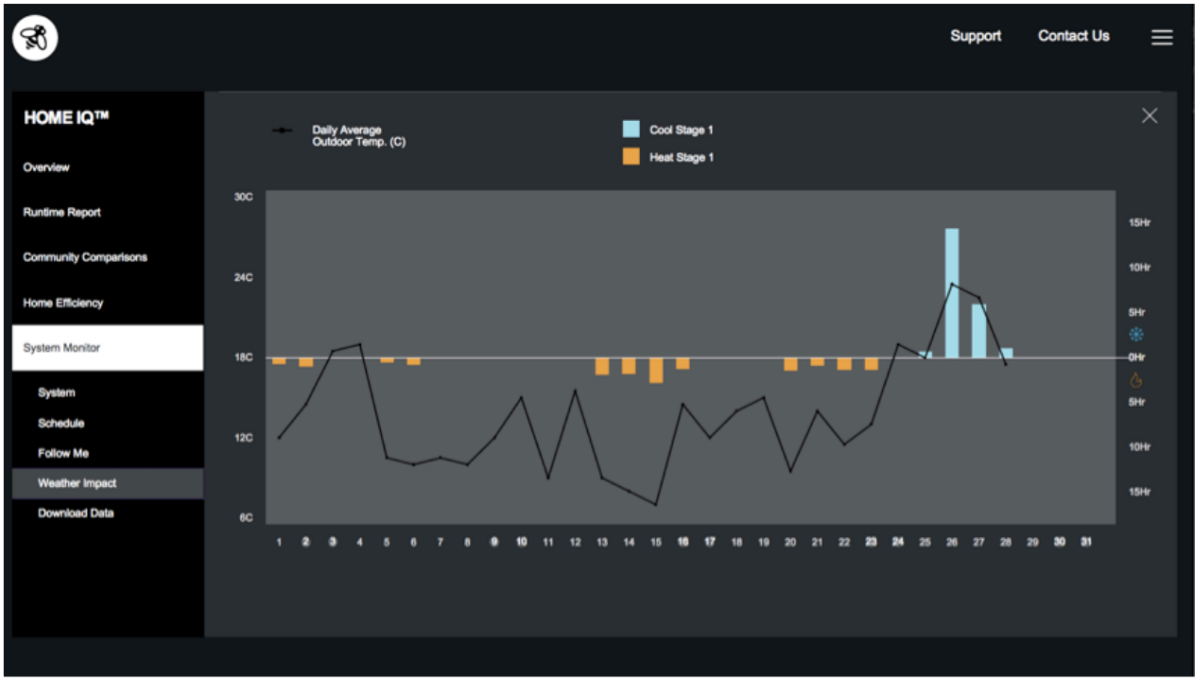
Weather Impact

Under the Weather Impact tab, you can see the weather (taken from the weather station closest to the the address you entered into your ecobee3 upon registration).

Weather Impact helps you understand how the weather influences your heating and cooling equipment runtime, affecting your energy bill, even when there is no change in your comfort settings.

The days of the month appear at the bottom, and the circled dates are the weekend. Using the Plus and Minus magnifying glasses allows you to zoom in for a closer look.

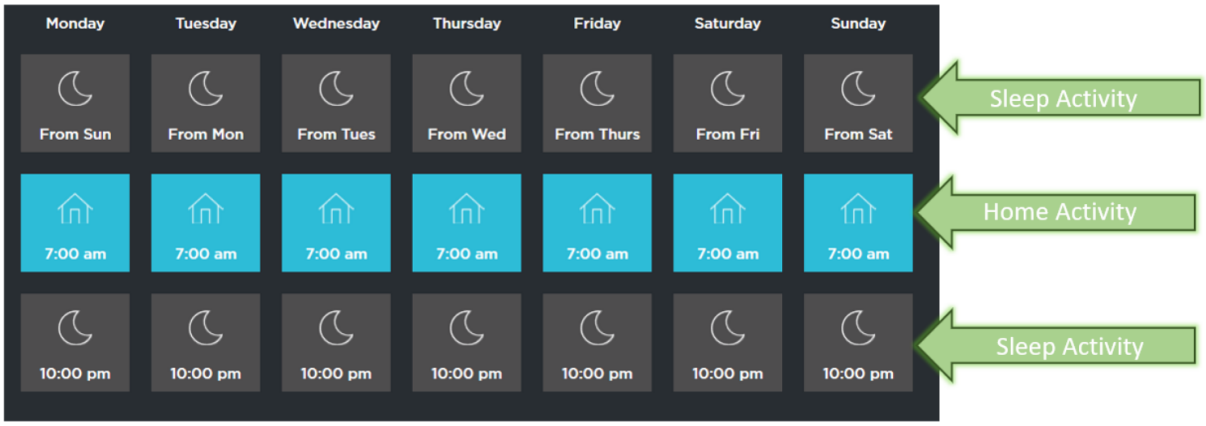
In the example below note that May, a shoulder month between spring and summer, saw both heating and cooling stages run.



https://www.ecobee.com/2017/08/learn-more-about-ecobee-home-iq-system-reports/

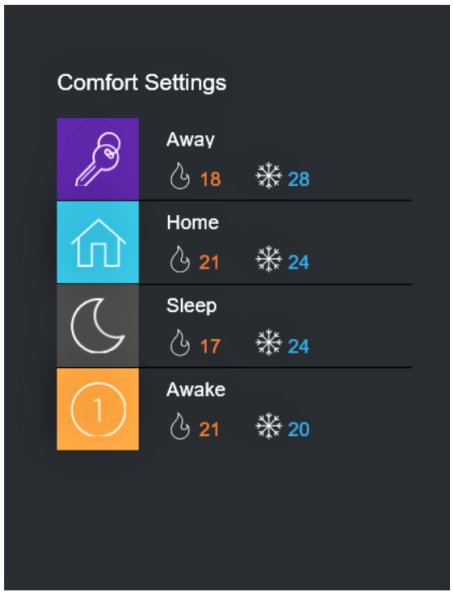
45. The Accused Instrumentalities further include "the one or more servers are further configured to receive a demand reduction request and determine whether the structure is associated

with demand rejection request, and based on the determination that the structure is associated with the demand reduction request, the one or more servers are further configured to send a signal to the thermostat to change the setting to a second setting to reduce electricity demand by the HVAC system." For example, using the mobile application users of the Accused Instrumentalities can instruct the Accused Instrumentalities to reduce the amount of usage of the devices in a variety of ways by implementing different temperature set points, scheduling and comfort settings, or other energy saving features. These requests are then used to configure the associated Accused Instrumentalities.



The next part of the schedule are your **Comfort Settings**. This tells your ecobee what temperature you want your home to be during your **Activities**. The orange number is the heat setting, and the blue number is the cool setting.

Essentially, Comfort Settings are a predefined heat/cool setting that can be applied to a specific period of a day.



See https://support.ecobee.com/hc/en-us/articles/360025406171-What-are-Activities-and-Comfort-Settings-

With the release of the ecobee3 firmware 3.6, ecobee customers have been able to choose which sensors should be used in each of the Comfort Settings in their thermostat schedules. This gives you the unprecedented control you have come to expect from ecobee.

Let's look at an example with a family that purchased the ecobee3 smarter bundle (which comes with 3 remote sensors) and placed the sensors in: the family room, the kitchen, and the master bedroom.

- In this case, you can tell your ecobee3 to use the temperature and occupancy data from only the kitchen in the morning during the Home Comfort Setting.
- Then, tell it to use the information from all three sensors and the ecobee3 to calculate an average home temperature during your Away Comfort Setting.
- From 5 PM until 7:30 PM, it could use the temperature reading in your kitchen, and heat or cool the house to keep the kitchen comfortable while you cook and eat dinner.
- From 7:30 PM until 11 PM it will use the remote sensor in your family room to keep you and your family comfortable while you watch TV.
- Finally, from 11 PM until you wake up in the morning it will use the sensor in the master bedroom during the Sleep Comfort Setting, so you can rest easy knowing ecobee3 is working hard while you sleep.

Just as you can select which sensors participate in Comfort Settings, you can select which don't participate. This is useful if you want to monitor the temperature in specific rooms in the house without them impacting the ecobee3 heating and cooling decisions. For example, you can place one in the garage, or in the wine cellar to keep an eye on your vintages.

See https://www.ecobee.com/2015/06/feature-friday-sensor-participation/

SMART HOME

When your ecobee senses someone's home during a scheduled Away period...

And the following conditions are met:

- The Away or Custom Away Comfort Setting *has* been active for over an hour.
- Smart Home *hasn't* been active for at least two hours.

Smart Home intelligently switches on your Home Comfort Setting for maximum comfort.

How long does Smart Home run for?

When it's active, Smart Home will stay in effect until
a) two hours pass with no occupancy detected; **b)** it is cancelled; or **c)** the start of the next scheduled Comfort Setting.

What temperature set points are in effect when Smart Home is running?

Smart Home uses your Home Comfort Setting's hot and cold set points.

SMART AWAY

When your ecobee senses nobody's home during a scheduled Home period...

And:

- No occupancy has been detected for two straight hours during a scheduled Home period or when Smart Home is running.

Smart Away intelligently overrides your usual schedule—helping you save on your energy bill.

How long does Smart Away run for?

Smart Away runs until it detects occupancy or until the start of the next scheduled Away period.

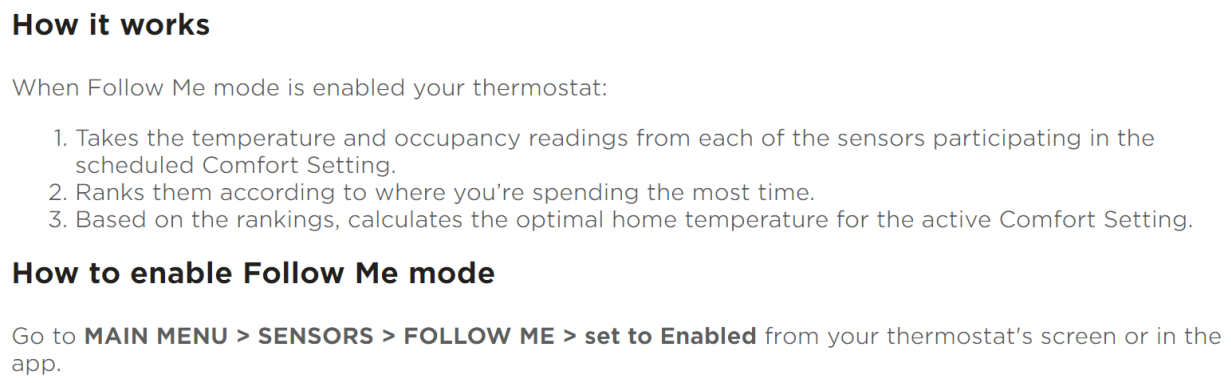
What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

recover the temperature gap.

How to enable Smart Home/Away

On your thermostat's screen or in the app, go to: **MAIN MENU > SENSORS > SMART HOME/AWAY > set to Enabled**



How it works

When Follow Me mode is enabled your thermostat:

1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
2. Ranks them according to where you're spending the most time.
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting

46. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Defendant has injured Plaintiff and are liable for infringement of the '327 Patent pursuant to 35 U.S.C. § 271.

47. As a result of Defendant's infringement of the '327 Patent, Plaintiff is entitled to monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.

48. Defendant's infringing activities have injured and will continue to injure Plaintiff, unless and until this Court enters an injunction prohibiting further infringement of the '327 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.

COUNT IV

INFRINGEMENT OF U.S. PATENT NO. 10,534,382

49. Plaintiff realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

50. Plaintiff is the owner and assignee of United States Patent No. 10,534,382 titled "System and method for using a wireless device as a sensor for an energy management system." The '382 patent was duly and legally issued by the United States Patent and Trademark Office on January 14, 2020. Plaintiff is the owner and assignee, possessing all substantial rights, to the '382 Patent. A true and correct copy of the '382 Patent is attached as Exhibit 4.

51. Defendant makes, uses, offers for sale, sells, and/or imports into the United States certain products and services that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '382 Patent, and continue to do so. By way of illustrative example, these infringing products and services include, without limitation, Defendant's products and services, *e.g.*, the ecobee3, ecobee3 lite, ecobee4, Ecobee SmartThermostat, and Ecobee SmartSensor and all versions and variations thereof since the issuance of the '382 Patent ("Accused Instrumentalities").

52. Defendant has had knowledge of the '382 patent from a date no later than the date of filing of this complaint. Defendant has known how the Accused Products are made and have known, or have been willfully blind to the fact, that making, using, offering to sell, and selling the accused products within the United States, or importing the Accused Products into the United States, would constitute infringement.

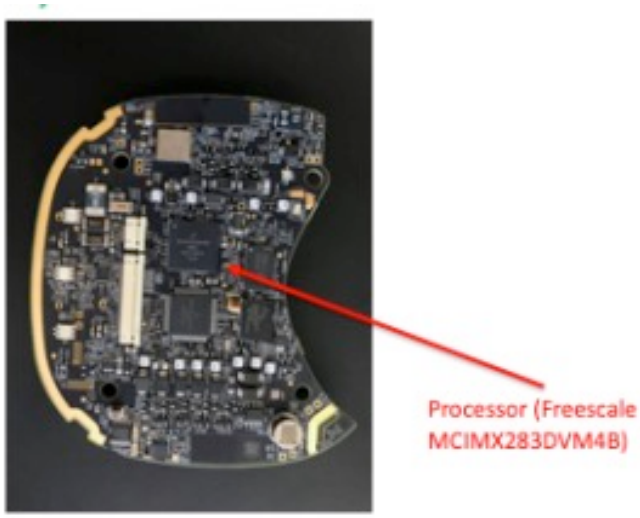
53. Defendant has induced, and continue to induce, infringement of the '382 patent by actively encouraging others (including distributors and end customers) to use, offer to sell, sell, and import the Accused Products. On information and belief, these acts include providing information and instructions on the use of the Accused Products; providing information, education and instructions supporting sales by distributors; providing the Accused Products to distributors; and indemnifying patent infringement within the United States.

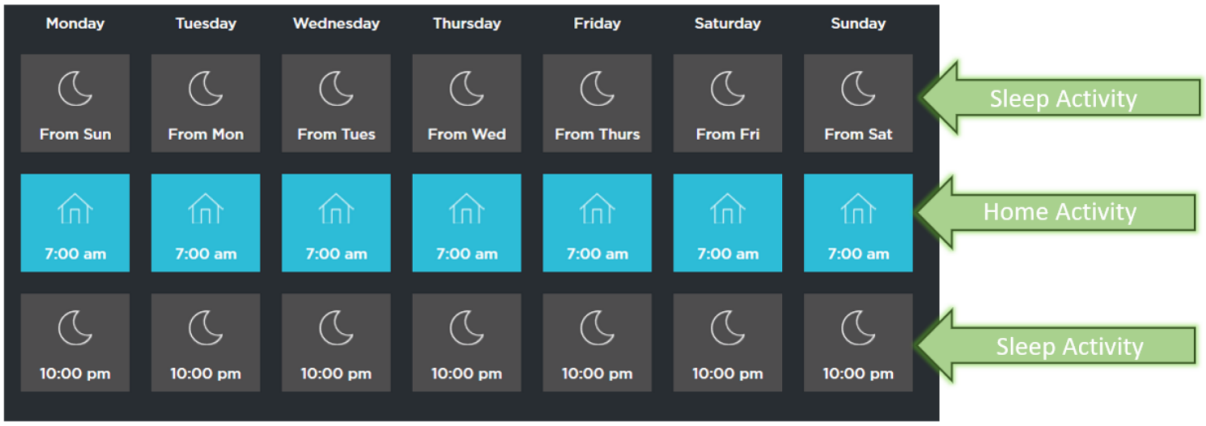
54. Defendant has also infringed, and continue to infringe, claims of the ‘382 patent by offering to commercially distribute, commercially distributing, making, and/or importing the Accused Products, which are used in practicing the process, or using the systems, of the patent, and constitute a material part of the invention. Defendant knows the components in the Accused Products to be especially made or especially adapted for use in infringement of the patent, not a staple article, and not a commodity of commerce suitable for substantial noninfringing use. Accordingly, Defendant has been, and currently are, contributorily infringing the ’382 patent, in violation of 35 U.S.C. § 271(c).

55. The Accused Products satisfy all claim limitations of one or more claims of the ’327 Patent. One, non-limiting, example of the Accused Instrumentalities’ infringement is presented below.

56. The Accused Instrumentalities include: “[a] system for controlling an HVAC system at a user's building, the system comprising: a memory; and one or more processors with circuitry and code designed to execute instructions.” For example, the Accused Instrumentalities includes memory, processors and circuity and code, to allow a user to set a schedule of heating and cooling.

https://www.ecobee.com/ecobee4/





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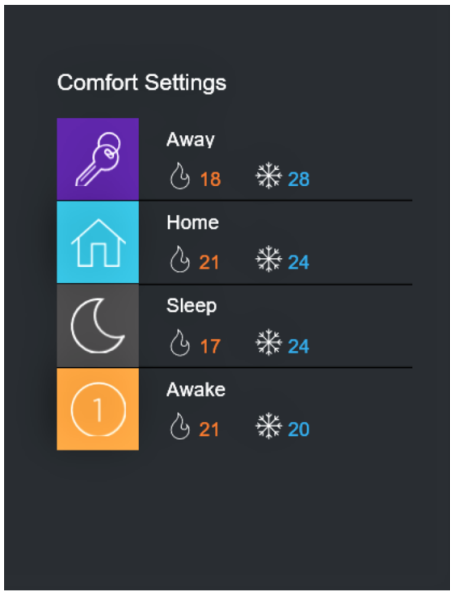


See https://support.ecobee.com/hc/en-us/articles/360025406171-What-are-Activities-and-Comfort-Settings-

57. The Accused Instrumentalities include "the one or more processors with circuitry and code designed to execute instructions to receive a first data from at least one sensor, wherein

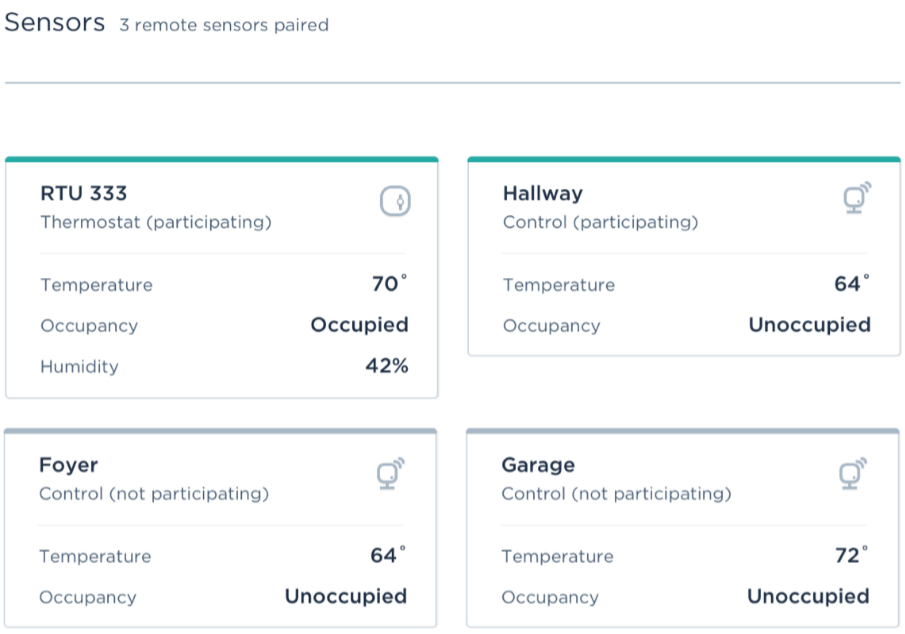
the first data from the at least one sensor includes a measurement of at least one characteristic of the building." For example, the Accused Instrumentalities can determine whether or not the user is at home, activity, temperature, and humidity

For ecobee3, ecobee3 lite, ecobee4

These thermostats are compatible with our ecobee Room Sensors. You can pair up to 32 wireless Room Sensors to each thermostat.

Our Room Sensors will measure **temperature** and **occupancy** in the space where it is located. Our thermostats themselves have built-in sensors to measure **temperature, humidity** and **occupancy** (ecobee3 and ecobee4 only).

You can view these sensors values by device. For example, thermostat RTU333 has 3 wireless ecobee Room Sensors paired as shown below:



ecobee Room Sensors can be in 3 different states:

1. **Monitoring:** The sensor is only monitoring the space, and is not used as part of the thermostat temperature control. A common use case is for monitoring a space or room that has specialized heating and cooling requirements that you want to keep track of, but you can't control with the thermostat.

2. **Control (participating):** The sensor is being used as a part of the thermostats temperature control during your Comfort Setting. When more than 1 sensor is participating in a Comfort Setting, the thermostat will average the temperatures across all participating sensors.

3. **Control (not participating):** The sensor is being used as a part of the thermostat temperature control, but not during the current Comfort Setting. This indicates that this sensor is used in a different Comfort Setting, but just is not a part of the currently active Comfort Setting.

Our wireless Room Sensors uses a low-power radio frequency (915MHz) to communicate with your ecobee for 2 years of battery life.

See https://support.ecobee.com/hc/en-us/articles/360020234551-Viewing-remote-sensors-

connected-to-a-thermostat

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https://www.ecobee.com/2017/08/learn-more-about-ecobee-home-iq-system-reports/

58. The Accused Instrumentalities include "the one or more processors with circuitry and code designed to execute instructions to receive a second data from a network connection, wherein the second data from the network connection is collected from a source external to the building, wherein the second data from the network connection is received via the Internet." For example, the Accused Instrumentalities receive information concerning local weather, which is received from the internet.

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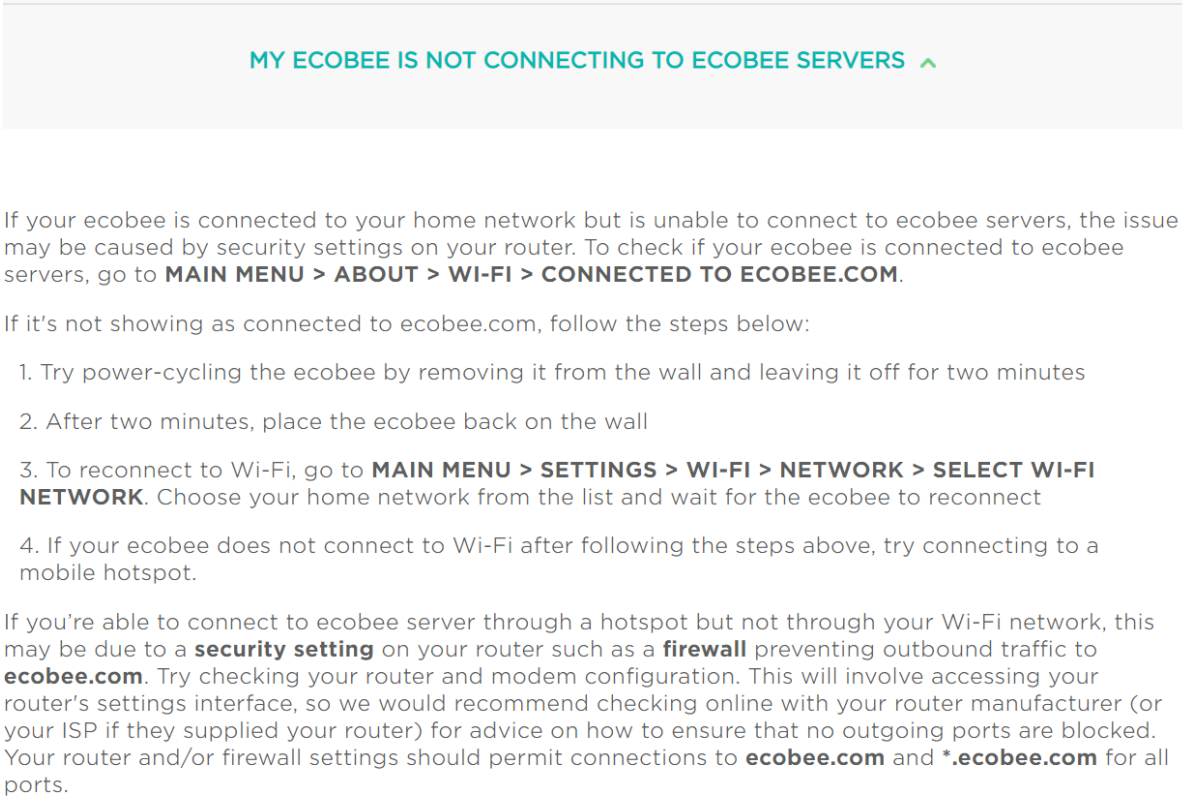

MY ECOBEE IS NOT CONNECTING TO ECOBEE SERVERS

If your ecobee is connected to your home network but is unable to connect to ecobee servers, the issue may be caused by security settings on your router. To check if your ecobee is connected to ecobee servers, go to **MAIN MENU > ABOUT > WI-FI > CONNECTED TO ECOBEE.COM**.

If it's not showing as connected to ecobee.com, follow the steps below:

1. Try power-cycling the ecobee by removing it from the wall and leaving it off for two minutes
2. After two minutes, place the ecobee back on the wall
3. To reconnect to Wi-Fi, go to **MAIN MENU > SETTINGS > WI-FI > NETWORK > SELECT WI-FI NETWORK**. Choose your home network from the list and wait for the ecobee to reconnect
4. If your ecobee does not connect to Wi-Fi after following the steps above, try connecting to a mobile hotspot.

If you're able to connect to ecobee server through a hotspot but not through your Wi-Fi network, this may be due to a **security setting** on your router such as a **firewall** preventing outbound traffic to **ecobee.com**. Try checking your router and modem configuration. This will involve accessing your router's settings interface, so we would recommend checking online with your router manufacturer (or your ISP if they supplied your router) for advice on how to ensure that no outgoing ports are blocked. Your router and/or firewall settings should permit connections to **ecobee.com** and ***.ecobee.com** for all ports.

https://support.ecobee.com/hc/en-us/articles/360029033431-Wi-Fi-FAQ-Setup-Guide-and-Troubleshooting-

59. The Accused Instrumentalities include "the one or more processors with circuitry and code designed to execute instructions to receive a first temperature setpoint for the building corresponding to a desired temperature setting when the building is occupied, and a second temperature setpoint for the building corresponding to a desired temperature setting when the building is unoccupied." For example, the Accused Instrumentalities will adjust the temperature of a room to a desired temperature based on whether or not the occupancy sensor detects that the room is occupied.

With the release of the ecobee3 firmware 3.6, ecobee customers have been able to choose which sensors should be used in each of the Comfort Settings in their thermostat schedules. This gives you the unprecedented control you have come to expect from ecobee.

Let's look at an example with a family that purchased the ecobee3 smarter bundle (which comes with 3 remote sensors) and placed the sensors in: the family room, the kitchen, and the master bedroom.

- In this case, you can tell your ecobee3 to use the temperature and occupancy data from only the kitchen in the morning during the Home Comfort Setting.
- Then, tell it to use the information from all three sensors and the ecobee3 to calculate an average home temperature during your Away Comfort Setting.
- From 5 PM until 7:30 PM, it could use the temperature reading in your kitchen, and heat or cool the house to keep the kitchen comfortable while you cook and eat dinner.
- From 7:30 PM until 11 PM it will use the remote sensor in your family room to keep you and your family comfortable while you watch TV.
- Finally, from 11 PM until you wake up in the morning it will use the sensor in the master bedroom during the Sleep Comfort Setting, so you can rest easy knowing ecobee3 is working hard while you sleep.

Just as you can select which sensors participate in Comfort Settings, you can select which don't participate. This is useful if you want to monitor the temperature in specific rooms in the house without them impacting the ecobee3 heating and cooling decisions. For example, you can place one in the garage, or in the wine cellar to keep an eye on your vintages.

See https://www.ecobee.com/2015/06/feature-friday-sensor-participation/

SMART HOME

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And the following conditions are met:

- The Away or Custom Away Comfort Setting *has* been active for over an hour.
- Smart Home *hasn't* been active for at least two hours.

Smart Home intelligently switches on your Home Comfort Setting for maximum comfort.

How long does Smart Home run for?

When it's active, Smart Home will stay in effect until
a) two hours pass with no occupancy detected; **b)** it is cancelled; or **c)** the start of the next scheduled Comfort Setting.

What temperature set points are in effect when Smart Home is running?

Smart Home uses your Home Comfort Setting's hot and cold set points.

SMART AWAY

When your ecobee senses nobody's home during a scheduled Home period...

And:

- No occupancy has been detected for two straight hours during a scheduled Home period or when Smart Home is running.

Smart Away intelligently overrides your usual schedule—helping you save on your energy bill.

How long does Smart Away run for?

Smart Away runs until it detects occupancy or until the start of the next scheduled Away period.

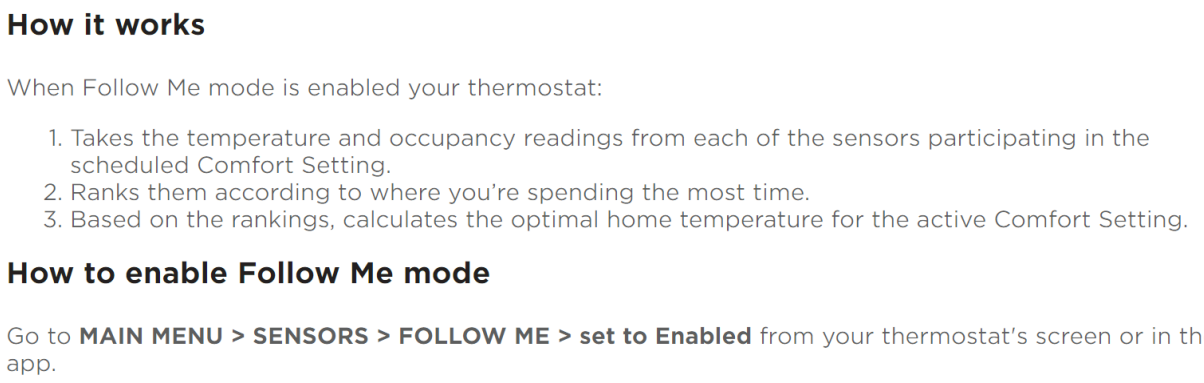
What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

recover the temperature gap.

How to enable Smart Home/Away

On your thermostat's screen or in the app, go to: **MAIN MENU > SENSORS > SMART HOME/AWAY > set to Enabled**



How it works

When Follow Me mode is enabled your thermostat:

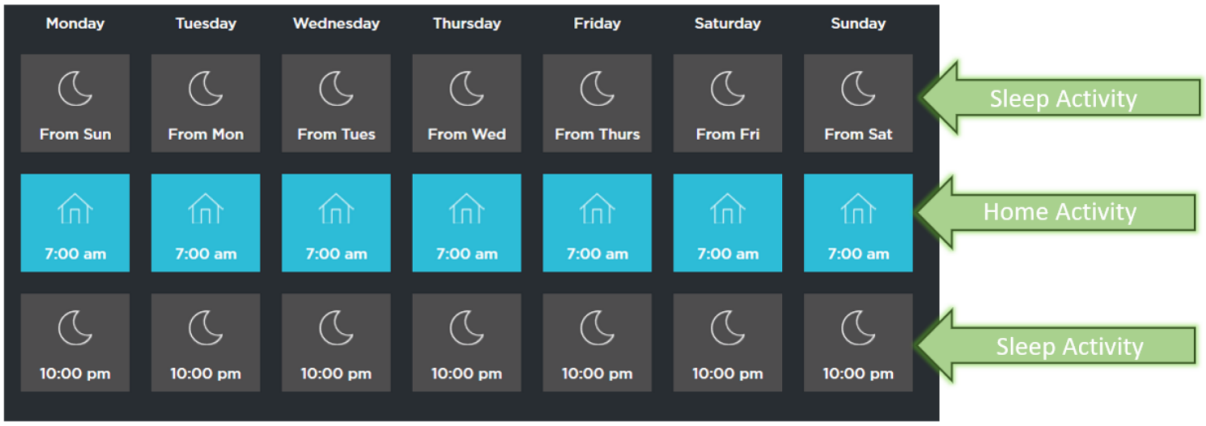
1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
2. Ranks them according to where you're spending the most time.
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

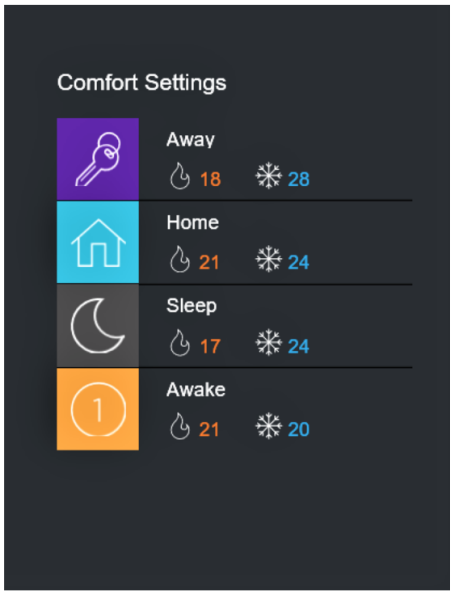
See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting

60. The Accused Instrumentalities include "the one or more processors with circuitry and code designed to execute instructions to receive commands through the Internet by way of a remote interface on a mobile, wireless device running software application code; wherein the interface is configured to allow the user to adjust temperature setpoints for the HVAC system; the one or more processors with circuitry and code designed to execute instructions to send user-specific data through the Internet, wherein user-specific information about the building and HVAC system is generated based at least in part on the user-specific data, wherein the user-specific information is configured to be presented on a user interface on a mobile, wireless device running software application code via the Internet." For example, using the Ecobee mobile application a user can change the set points at which heating and cooling commence be preparing schedules, comfort settings, setting temperatures, and enabling modes like Smart Home/Away and Follow Me.



The next part of the schedule are your **Comfort Settings**. This tells your ecobee what temperature you want your home to be during your **Activities**. The orange number is the heat setting, and the blue number is the cool setting.

Essentially, Comfort Settings are a predefined heat/cool setting that can be applied to a specific period of a day.



See https://support.ecobee.com/hc/en-us/articles/360025406171-What-are-Activities-and-Comfort-Settings-

With the release of the ecobee3 firmware 3.6, ecobee customers have been able to choose which sensors should be used in each of the Comfort Settings in their thermostat schedules. This gives you the unprecedented control you have come to expect from ecobee.

Let's look at an example with a family that purchased the ecobee3 smarter bundle (which comes with 3 remote sensors) and placed the sensors in: the family room, the kitchen, and the master bedroom.

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- From 7:30 PM until 11 PM it will use the remote sensor in your family room to keep you and your family comfortable while you watch TV.
- Finally, from 11 PM until you wake up in the morning it will use the sensor in the master bedroom during the Sleep Comfort Setting, so you can rest easy knowing ecobee3 is working hard while you sleep.

Just as you can select which sensors participate in Comfort Settings, you can select which don't participate. This is useful if you want to monitor the temperature in specific rooms in the house without them impacting the ecobee3 heating and cooling decisions. For example, you can place one in the garage, or in the wine cellar to keep an eye on your vintages.

See https://www.ecobee.com/2015/06/feature-friday-sensor-participation/

SMART HOME

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And the following conditions are met:

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- Smart Home *hasn't* been active for at least two hours.

Smart Home intelligently switches on your Home Comfort Setting for maximum comfort.

How long does Smart Home run for?

When it's active, Smart Home will stay in effect until
a) two hours pass with no occupancy detected; **b)** it is cancelled; or **c)** the start of the next scheduled Comfort Setting.

What temperature set points are in effect when Smart Home is running?

Smart Home uses your Home Comfort Setting's hot and cold set points.

SMART AWAY

When your ecobee senses nobody's home during a scheduled Home period...

And:

- No occupancy has been detected for two straight hours during a scheduled Home period or when Smart Home is running.

Smart Away intelligently overrides your usual schedule—helping you save on your energy bill.

How long does Smart Away run for?

Smart Away runs until it detects occupancy or until the start of the next scheduled Away period.

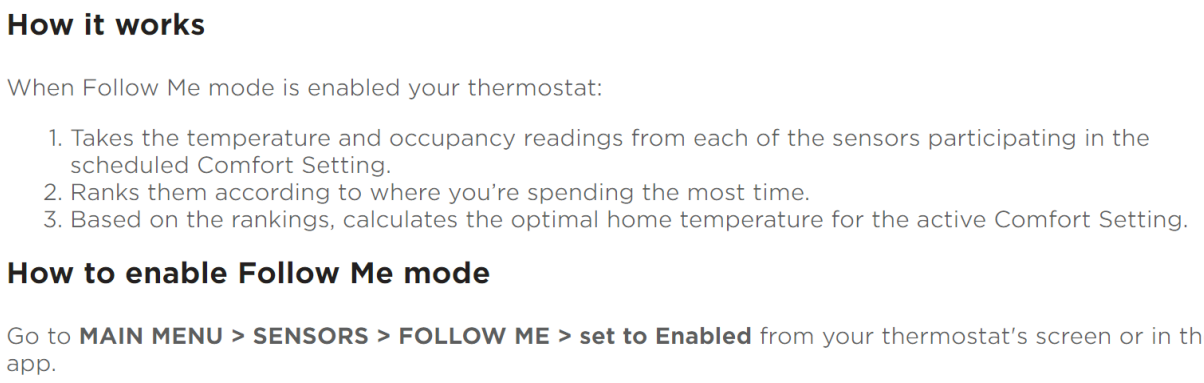
What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

recover the temperature gap.

How to enable Smart Home/Away

On your thermostat's screen or in the app, go to: **MAIN MENU > SENSORS > SMART HOME/AWAY > set to Enabled**



How it works

When Follow Me mode is enabled your thermostat:

1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
2. Ranks them according to where you're spending the most time.
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

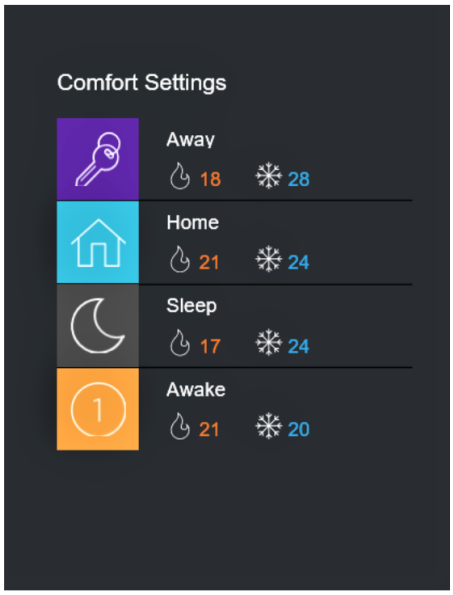
Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting

61. The Accused Instrumentalities include "the one or more processors with circuitry and code designed to execute instructions to determine whether the building is occupied or unoccupied, and based on that determination, to control the HVAC system to provide heating or cooling to the building at an operational temperature." For example, the Accused Instrumentalities will provide heating or cooling based on whether a building is occupied or unoccupied.

The next part of the schedule are your **Comfort Settings**. This tells your ecobee what temperature you want your home to be during your **Activities**. The orange number is the heat setting, and the blue number is the cool setting.

Essentially, Comfort Settings are a predefined heat/cool setting that can be applied to a specific period of a day.



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- In this case, you can tell your ecobee3 to use the temperature and occupancy data from only the kitchen in the morning during the Home Comfort Setting.
- Then, tell it to use the information from all three sensors and the ecobee3 to calculate an average home temperature during your Away Comfort Setting.
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- Finally, from 11 PM until you wake up in the morning it will use the sensor in the master bedroom during the Sleep Comfort Setting, so you can rest easy knowing ecobee3 is working hard while you sleep.

Just as you can select which sensors participate in Comfort Settings, you can select which don't participate. This is useful if you want to monitor the temperature in specific rooms in the house without them impacting the ecobee3 heating and cooling decisions. For example, you can place one in the garage, or in the wine cellar to keep an eye on your vintages.

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SMART HOME

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- Smart Home *hasn't* been active for at least two hours.

Smart Home intelligently switches on your Home Comfort Setting for maximum comfort.

How long does Smart Home run for?

When it's active, Smart Home will stay in effect until
a) two hours pass with no occupancy detected; **b)** it is cancelled; or **c)** the start of the next scheduled Comfort Setting.

What temperature set points are in effect when Smart Home is running?

Smart Home uses your Home Comfort Setting's hot and cold set points.

SMART AWAY

When your ecobee senses nobody's home during a scheduled Home period...

And:

- No occupancy has been detected for two straight hours during a scheduled Home period or when Smart Home is running.

Smart Away intelligently overrides your usual schedule—helping you save on your energy bill.

How long does Smart Away run for?

Smart Away runs until it detects occupancy or until the start of the next scheduled Away period.

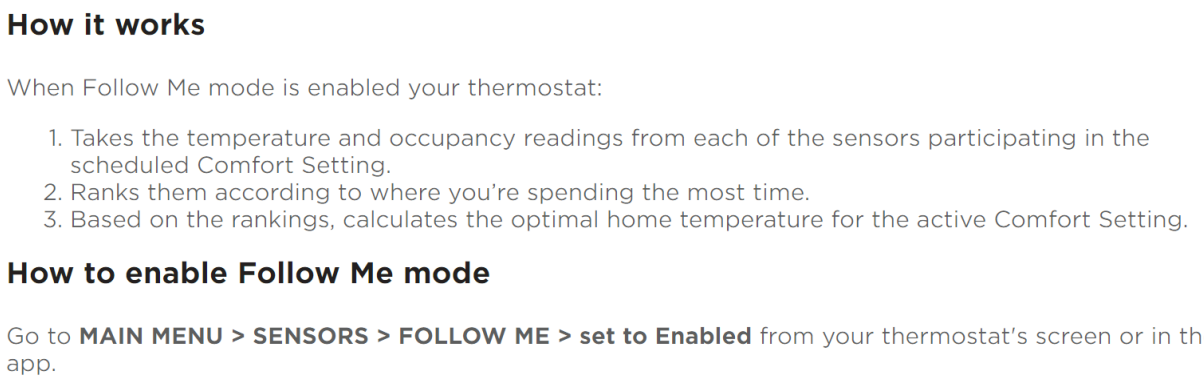
What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

recover the temperature gap.

How to enable Smart Home/Away

On your thermostat's screen or in the app, go to: **MAIN MENU > SENSORS > SMART HOME/AWAY > set to Enabled**



How it works

When Follow Me mode is enabled your thermostat:

1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
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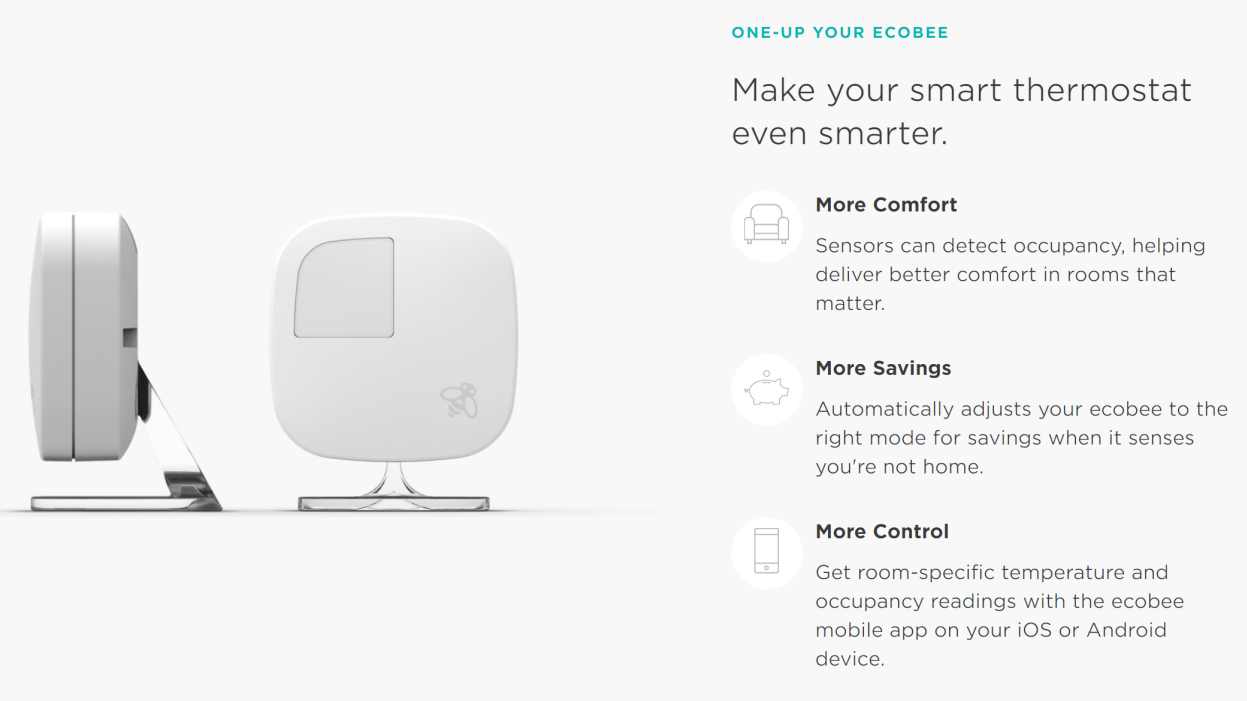
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

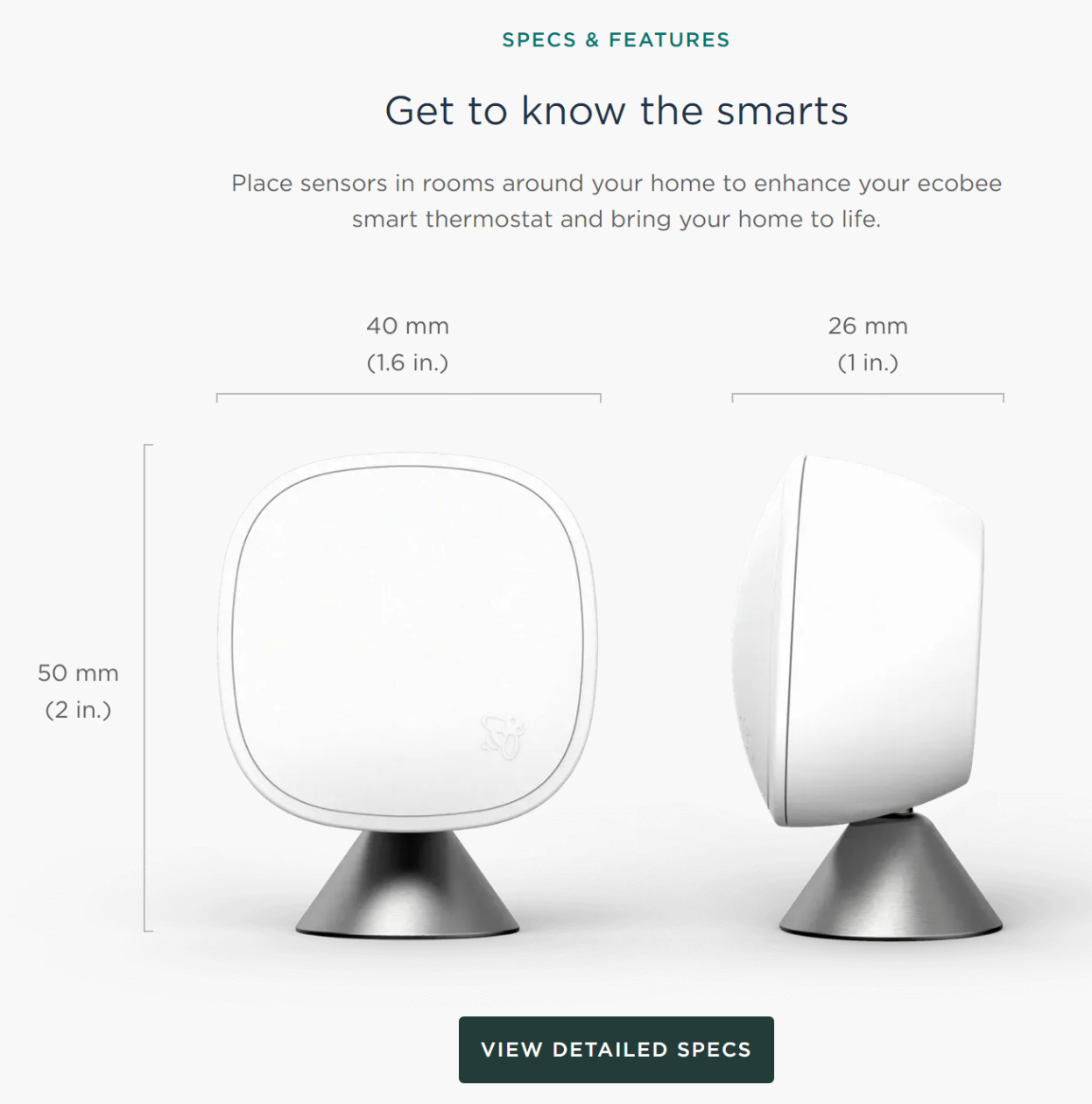
Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting

62. The Accused Instrumentalities include "wherein the one or more processors comprises a first processor with circuitry and code designed to execute instructions, which is located remotely from the memory and is not electrically connected to the memory; the first processor with circuitry and code designed to execute instructions to communicate with the memory." For example, using a mobile device with the Ecobee mobile application, which is not connected to the memory on the Accused Instrumentalities, a user can change the setpoints, Home or Away settings, create comfort settings, create schedules, and enable or disable various modes through communication with the Accused Instrumentalities. In addition the Accused Instrumentalities include monitors that are remote from the memory and not connected to the memory that communicate with the memory regarding temperature, occupancy, humidity, settings, and other data.



https://www.ecobee.com/room-sensors/



https://www.ecobee.com/en-us/smart-sensor/

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Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

recover the temperature gap.

How to enable Smart Home/Away

On your thermostat's screen or in the app, go to: **MAIN MENU > SENSORS > SMART HOME/AWAY > set to Enabled**

How it works

When Follow Me mode is enabled your thermostat:

1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
2. Ranks them according to where you're spending the most time.
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting

63. The Accused Instrumentalities include "wherein the memory is configured to store historical values of the first data and second data." For example, on information and belief, the Accused Instrumentalities store historical information about when the room was occupied, humidity, internal and external temperature, weather information, among other things. This information is communicated to an Ecobee server and may additionally be used to estimate the expected rate of change of temperature.

What temperature set points are in effect when Smart Away is running?

Since your ecobee thermostat knows that it will have to recover the temperature gap should you return, it sets the temperature to where it can quickly get your home back to your Home Comfort Setting set points, while still conserving energy. (Typically, 1–4° Fahrenheit lower than your Home set points.*)

*Actual number is based on your ecobee's ongoing analysis of your HVAC's equipment's ability to recover the temperature gap.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting

Schedule

Under the Schedule tab, you can view data on your equipment runtime relative to your schedule. This will provide insight into how the system is operating, the temperature outside and inside, and how this all relates to your setbacks and settings in each Comfort Setting.

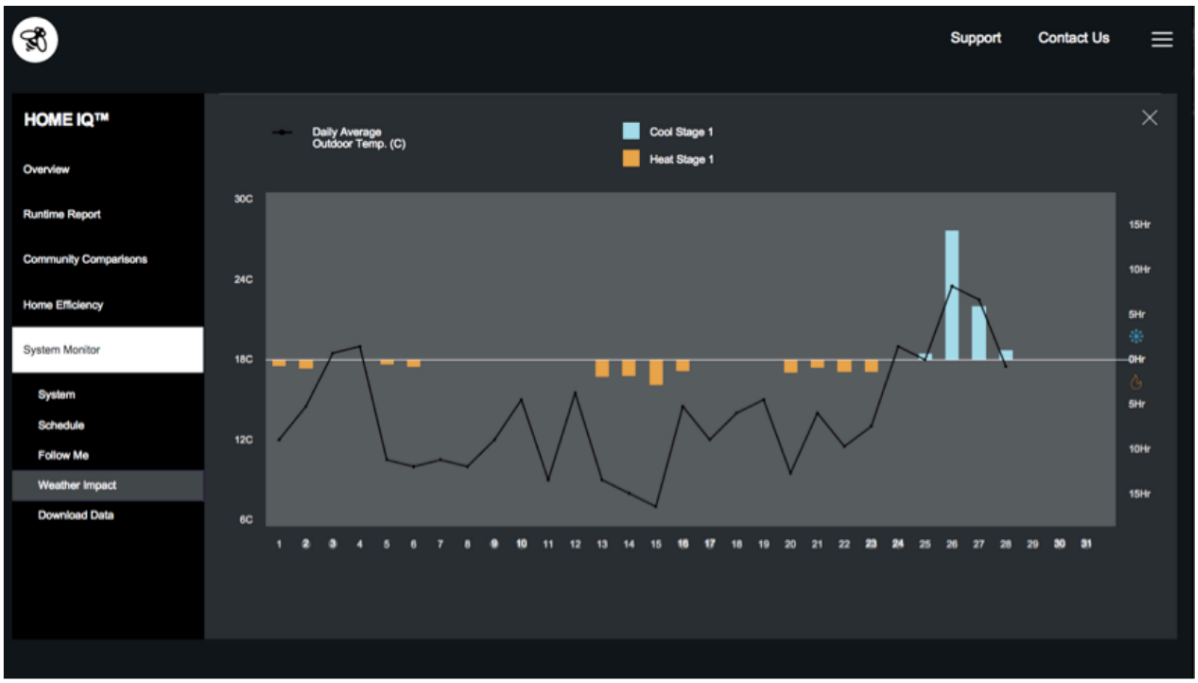
Weather Impact

Under the Weather Impact tab, you can see the weather (taken from the weather station closest to the the address you entered into your ecobee3 upon registration).

Weather Impact helps you understand how the weather influences your heating and cooling equipment runtime, affecting your energy bill, even when there is no change in your comfort settings.

The days of the month appear at the bottom, and the circled dates are the weekend. Using the Plus and Minus magnifying glasses allows you to zoom in for a closer look.

In the example below note that May, a shoulder month between spring and summer, saw both heating and cooling stages run.



https://www.ecobee.com/2017/08/learn-more-about-ecobee-home-iq-system-reports/

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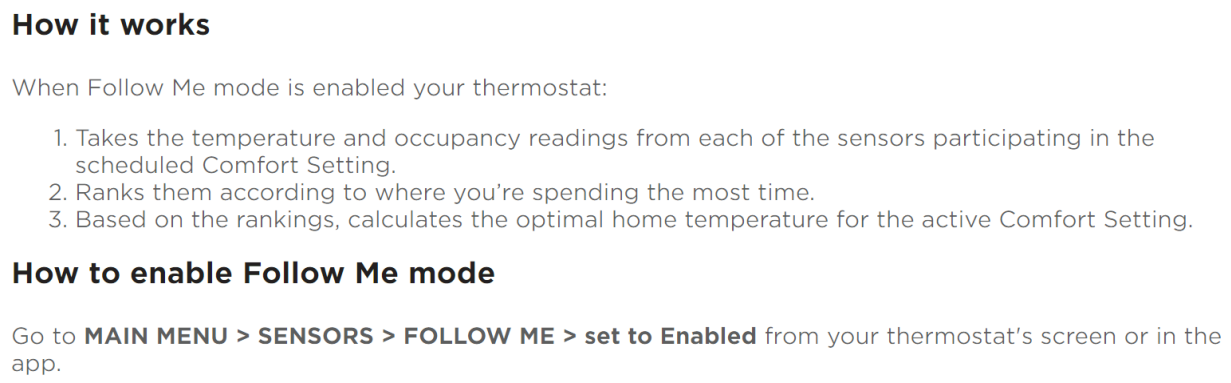

How it works

When Follow Me mode is enabled your thermostat:

1. Takes the temperature and occupancy readings from each of the sensors participating in the scheduled Comfort Setting.
2. Ranks them according to where you're spending the most time.
3. Based on the rankings, calculates the optimal home temperature for the active Comfort Setting.

How to enable Follow Me mode

Go to **MAIN MENU > SENSORS > FOLLOW ME > set to Enabled** from your thermostat's screen or in the app.

See https://support.ecobee.com/hc/en-us/articles/227874847-Room-Sensor-FAQs-Setup-Guide-and-Troubleshooting.

64. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Defendant has injured Plaintiff and are liable for infringement of the '382 Patent pursuant to 35 U.S.C. § 271.

65. As a result of Defendant's infringement of the '382 Patent, Plaintiff is entitled to monetary damages in an amount adequate to compensate for Defendant's infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendant, together with interest and costs as fixed by the Court.

66. Defendant's infringing activities have injured and will continue to injure Plaintiff, unless and until this Court enters an injunction prohibiting further infringement of the '382 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter:

a. A judgment in favor of Plaintiff that Defendant has infringed, either literally and/or under the doctrine of equivalents, the '492 Patent, the '488 Patent, the '327 Patent, and the '382

Patent;

b. A permanent injunction prohibiting Defendant from further acts of infringement of the '492 Patent, the '488 Patent, the '327 Patent, and the '382 Patent;

c. A judgment and order requiring Defendant to pay Plaintiff its damages, enhanced damages, costs, expenses, and pre-judgment and post-judgment interest for Defendant's infringement of the '492 Patent, the '488 Patent, the '327 Patent, and the '382 Patent;

d. A judgment and order requiring Defendant to provide accountings and to pay supplemental damages to Plaintiff, including without limitation, pre-judgment and post-judgment interest;

e. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiff its reasonable attorneys' fees against Defendant; and

f. Any and all other relief as the Court may deem appropriate and just under the circumstances.

DEMAND FOR JURY TRIAL

Plaintiff, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

Dated: January 31, 2020

Respectfully submitted,

/s/ Reza Mirzaie

Reza Mirzaie
Marc A. Fenster
Paul A. Kroeger
C. Jay Chung
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Los Angeles, California 90025
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Attorneys for Plaintiff EcoFactor, Inc.